

REMARKS

Claims 1-50 are all the claims pending in the application. Claims 1-50 presently stand rejected.

The Examiner is respectfully requested to return the initialed PTO/SB/08 as filed with the Information Disclosure Statement on October 27, 2003.

The Examiner is respectfully requested to indicate approval of the drawings filed with the application on February 7, 2002.

Claims 1-10 and 26-37 are rejected under 35 U.S.C. § 102(b) as being anticipated by Zhou (USP 6,081,638).

Claims 11-25 and 38-50 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukutomi (US 2001/0033716 A1) in view of Zhou (USP 6,081,638).

For the reasons that follow, Applicant respectfully traverses the rejection and requests favorable disposition of the application. Claims 1, 2, 18, 20, 26, 27, 32, 33, 38, 41, 44 and 48 have been amended for clarification purposes only. The claim rejections are fully addressed by the arguments presented below.

Argument

In regard claims 1-9 and 26-36, claims 1, 26 and 32 are the only independent claims. Accordingly, the discussion below is directed to these claims initially.

The grounds of rejection assert that Zhou teaches each and every limitation of claims 1, 26 and 32. Applicant respectfully disagrees at least because Zhou fails to teach, or even suggest, the recited optical transmitting means of claim 1 or the light monitor recited in claims 26 and 32.

In particular, one object of the invention disclosed and claimed in the present application is to make the installment of the light monitoring element easier and to improve optical output by increasing the reflectance of back surface of the light emitting element. To this end, an optical transmitting means is claimed in claim 1 for receiving *forward light* emitted from a light emitting means provided on a clad layer. Claims 26 and 32 each recite a light monitor that receives *forward light* provided on the clad layer, emitted from the light emitting element.

Zhou discloses, for example in FIG. 5, detector 103 that monitors light transmitted through coating 105, which coats an optical fiber, so the optical power loss arises because coating 105 divides emitted light into two parts, light transmitted through the coating and light reflected.

In comparison, the invention disclosed (see, for example, par. 0008 and par. 0019) and claimed in claims 1, 26 and 32, requires a light, located on the clad layer, and a monitor 13 that receives part of the leakage light is not coupled to the optical waveguide 14. That is, one of the benefits of the claimed invention is that it utilizes leakage light and, unlike Zhou, does not lose emitted light power.

Further, Zhou uses a prism 104 or fiber coating 105 to reflect a control signal, and a header block to stabilize the fiber. The present invention does not need these devices. Therefore, it is easier and more economical to make device of the present than Zhou's.

For at least the reason set forth above, claims 1, 26 and 32 are patentable over the cited Zhou reference and the §102 rejection to these claims should be withdrawn. Additionally, by

virtue of their dependency from claims 1, 26 or 32, dependent claims 2-10, 27-31 and 33-37, respectively, are patentable as well.

In regard to the §103 rejection of claims 11-17, 18-25 and 38-50, claims 11, 18, 38 and 44 are the only independent claims. Accordingly, the discussion below is directed to these claims initially.

Fukutomi fails to compensate for the deficiency of Zhou discussed above. Claims 11, 18, 38 and 44 each include a feature similar to that which is discussed above, i.e., the recited monitor or monitor means. Accordingly, the proposed combination of Zhou and Fukutomi does not teach or suggest all of the requirements of these claims.

In particular, Fukutomi discloses an optical device comprising a monitoring means for receiving *backward light* emitted. Thus, Fukutomi discloses neither a monitor for monitoring forward light which is a portion of a leakage light, or the structure of the monitoring means that is located on a clad layer.

Accordingly, even if the two references mentioned above were somehow combined, the resultant combination would not lead to the claimed invention because the two references do not disclose the monitoring means located on the clad layer to monitor a portion of the leakage light of forward light that is not coupled to the optical waveguide.

For at least the reasons set forth above, Applicant respectfully submits that none of claims 11, 18, 38 and 44 are rendered obvious by the proposed combination of Zhou and Fukutomi. Further, for at least the same reasons, dependent claims 12-17, 19-25, 39-43 and 45-50 are patentable as well. Withdrawal of the §103 rejection is, thus, requested.


AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 10/067,337

Conclusion

In view of the foregoing remarks, the application is believed to be in form for immediate allowance with claims 1-50, and such action is hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, he is kindly requested to **contact the undersigned** at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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